

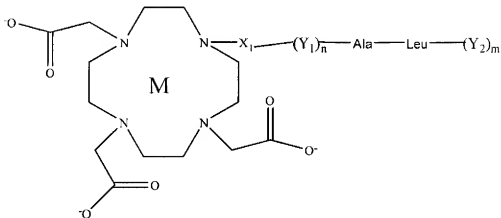
## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

**1-18. (Canceled)**

**19. (Currently Amended)** A method comprising:

- a) administering an MRI agent having the formula:

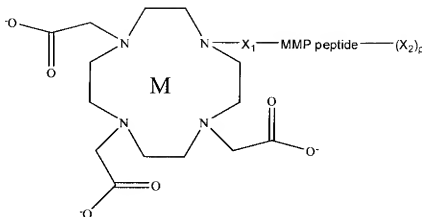


wherein  $Y_1$  and  $Y_2$  are independently chosen amino acid moieties;  
 $n$  and  $m$  are integers each independently an integer chosen from 0 to 5; and  
 $X_1$  is an independent a linker; and  
salts thereof or a salt thereof, wherein said administering step results in an  
increase in the  $q$  value of said MRI agent or said salt ; and

- b) producing a magnetic resonance image of a cell, tissue, or patient.

**20. (Currently Amended)** A method comprising:

- a) administering an activatable MRI agent having the formula:



wherein

M is a paramagnetic metal ion selected from the group consisting of Gd(III), Fe(III), Mn(II), Y(III), Cr(III), Eu(III), and Dy(III);

X<sub>1</sub> is an aryl group or an alkyl group;

X<sub>2</sub> is an aryl group, an alkyl group, a carbohydrate group, a nucleic acid group, or a lipid group;

MMP is a matrix metalloproteinase (MMP) active peptide; and

p is an integer from 0 to 1; and

~~salts thereof or a salt thereof; and~~

b) contacting said MRI agent under conditions wherein said MMP active peptide is cleaved by ~~interacts interacting~~ with [[a]] an MMP such that the T<sub>1</sub> of the said MRI agent is decreased the q value of said MRI agent is increased; and,

c) producing a magnetic resonance image of a cell, tissue, or patient.

21. (Previously Presented) A method according to claim 19, wherein said M is Gd(III).

22. (Previously Presented) A method according to claim 20, wherein said M is Gd(III).

23. (Previously Presented) A method according to claim 19, wherein X<sub>1</sub> is selected from the group consisting of an aryl or alkyl group.

24 & 25. (Canceled)

26. (Withdrawn) A method according to claim 19, wherein X<sub>1</sub> is -(CH<sub>2</sub>CO)-, Y<sub>1</sub> is -Pro-Met- when n = 2, and Y<sub>2</sub> is -Trp-Met-Arg when m = 1 (SEQ ID NO: 4).

27. **(Withdrawn)** A method according to claim 19, wherein  $X_1$  is  $-(CH_2CO)-$ ,  $Y_1$  is  $-Met-$  when  $n = 1$ , and  $Y_2$  is  $-Trp-Met-Arg$  when  $m = 3$  (SEQ ID NO:2).

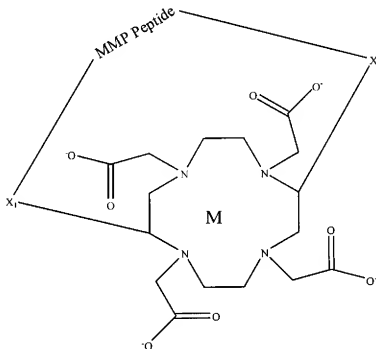
28. **(Withdrawn)** A method according to claim 19, wherein  $X_1$  is  $-(CH_2CO)-$ ,  $n = 0$ , and  $Y_2$  is  $-Trp-Met-Arg$  when  $m = 3$  (SEQ ID NO:3).

29. **(Previously Presented)** A method according to claim 20, wherein said MMP is MMP 7.

30. **(Withdrawn)** A method according to claim 20, wherein  $X_1$  is  $-(CH_2CO)-$ , said MMP peptide comprises  $Leu-Met-Trp-Arg$ , and  $p = 0$  (SEQ ID NO:20).

31. **(Withdrawn - currently amended)** A method comprising:

a) administering an MRI agent having the formula:



wherein

M is a paramagnetic metal ion selected from the group consisting of Gd(III),

Fe(III), Mn(II), Y(III), Cr(III), Eu(III), and Dy(III);

$X_1$  and  $X_2$  are each independently chosen linkers; and

MMP is a matrix metalloproteinase (MMP) active peptide; and

salts thereof; or a salt thereof;

b) contacting said MRI agent under conditions wherein said MMP active peptide interacts with a MMP such that the  $T_1$  of the said MRI agent is decreased; and,

- c) producing a magnetic resonance image of a cell, tissue, or patient.
32. **(Withdrawn)** A method according to claim 31, wherein said M is Gd(III).
33. **(Withdrawn)** A method according to claim 31, wherein  $X_1$  and  $X_2$  are independently selected from the group consisting of p-aminobenzyl or substituted p-aminobenzyl.
34. **(Withdrawn)** A method according to claim 31, wherein said MMP peptide is Pro-Met-Ala-Leu-Trp-Met-Arg (SEQ ID NO: 4).
35. **(Withdrawn)** A method according to claim 31, wherein said MMP is MMP 7.
36. **(Withdrawn)** A method according to claim 31, wherein said MRI agent has the formula:

